



**UNITED STATES DEPARTMENT OF COMMERCE**  
**Patent and Trademark Office**

Address: COMMISSIONER OF PATENTS AND TRADEMARKS  
Washington, D.C. 20231

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
-----------------	-------------	----------------------	---------------------

09/546,735 04/11/00 LUEERS

G W-9465-02

EXAMINER
----------

IM52/0619

CHARLES A. CROSS  
W. R. GRACE & CO.-CONN.  
PATENT DEPT.  
7500 GRACE DRIVE  
COLUMBIA MD 21044-4098

BERMAN, S	PAPER NUMBER
ART UNIT	

1711  
DATE MAILED:

06/19/01

**Please find below and/or attached an Office communication concerning this application or proceeding.**

**Commissioner of Patents and Trademarks**

# Office Action Summary

Application No.

09/546,735

Applicant(s)

LUEERS ET AL.

Examiner

Susan W Berman

Art Unit

1711

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-10 and 20-33 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-10 and 20-33 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claims \_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are objected to by the Examiner.
- 11) ☐ The proposed drawing correction filed on \_\_\_\_ is: a) ☐ approved b) ☐ disapproved.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. § 119

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☒ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

## Attachment(s)

- 15) ☐ Notice of References Cited (PTO-892)
- 16) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 17) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 6,7.
- 18) ☐ Interview Summary (PTO-413) Paper No(s) \_\_\_\_.
- 19) ☐ Notice of Informal Patent Application (PTO-152)
- 20) ☐ Other:

Art Unit: 1711

*Claim Rejections - 35 USC § 112*

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-10 and 20-33 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. It is not clear what "total composition" is being referred to in the recitation of "about 15 to 30 % by weight of the total composition". In claim 1, the phrase appears to refer to the matting agent composition and in claim 10 the phrase appears to refer to the coating composition. The UV curable substances are not considered to be excluded from "the matting agent composition" in claim 1.

Claim 33 is unclear because it depends from claim 32, which recites a specific matting efficiency, but recites a matting efficiency different from that in claim 32.

*Claim Rejections - 35 USC § 102*

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

Claims 1, 3-6, 8, 20 and 22-32 are rejected under 35 U.S.C. 102(e) as being anticipated by WO 98/58030. WO '030 discloses a wax-coated silica flattening agent wherein the pore volume is between 1.0 and 2.0 ml/g, the average particle size is between 4.0 and 12.0 microns and the wax coating preferably represents 6 to 15% by weight of the uncoated silica. See page 5, lines 10-19. A photocurable system

Art Unit: 1711

comprising vinyl ether or (meth)acrylate monomers and cycloaliphatic epoxy is also taught. The properties of the instantly claimed flatting agent and the disclosed flatting agent overlap with respect to particle size from 4 to 12 microns, pore volume from 1.0 to 1.4 ml/g and wax content of about 15% by weight. EP '030 teaches that the wax coating preferably represents 6 to 15 % by weight of the uncoated silica while applicant claims a wax content of about 15 to 30% by weight of the total composition. The components of the "total composition" are not concisely defined (the matting agent in claim 1 or the coating composition in claim 20), therefore it is not clear what the extent of overlap is.

Claims 1-10 are rejected under 35 U.S.C. 102(b) as being anticipated by Aldcroft et al (5,326,395). Aldcroft et al disclose a wax coated silica matting agent wherein the pore volume is between 0.8 to 2.5 cc/g, the particle size is between 5-9 microns and the wax content is from 5-20% w/w based on the weight of the silica to have the optimum effect. See column 2. The matting agent set forth in the instant claims is anticipated by wax coated silica disclosed by Aldcroft et al having the same properties as are recited in the instant claims. With respect to claim 2, the wax coated silica wherein the wax content is from 18-20% is anticipated. With respect to claims 6, 7 and 10, the wax coated silica wherein the size is about 5 microns is anticipated by Aldcroft et al.

### *Claim Rejections - 35 USC § 103*

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 21 is rejected under 35 U.S.C. 103(a) as being unpatentable over WO 98/58030 as applied to claims 1-10, 20 and 22-30 above, and further in view of Aldcroft et al. The disclosure of the references

Art Unit: 1711

are discussed above. WO '030 teaches that the wax coating preferably represents 6 to 15% by weight of the uncoated silica. Aldcroft et al disclose a wax coated silica matting agent wherein the wax content is from 5-20% w/w based on the weight of the silica to have the optimum effect. It would have been obvious to one skilled in the art at the time of the invention to employ a wax coated silica having a wax content from 18-20% w/w based on the weight of the silica in the compositions disclosed by WO '030. One skilled in the art at the time of the invention would have been motivated by a reasonable expectation of providing a useful matting paste for the cationic system taught by WO '030. WO '030 provides motivation because the references teaches that the wax coating preferably represents 6 to 15 % by weight of the weight of the uncoated silica, thus not limiting the weight % wax to 6 to 15%. Aldcroft et al provide motivation by teaching that the wax content of wax coated silica from 5-20% w/w based on the weight of the silica provides an optimum matting effect.

Claims 1, 3-6, 8, 20 and 22-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over WO 93/21240 in view of WO 98/58030. US 5,792,827 is relied upon for the disclosure of WO '240. WO '240 discloses radiation curable compositions comprising amine-modified polyether acrylates and flatting agents. WO '030 discloses a wax-coated silica flatting agent wherein the pore volume is between 1.0 and 2.0 ml/g, the average particle size is between 4.0 and 12.0 microns and the wax coating preferably represents 6 to 15% by weight of the uncoated silica. See page 5, lines 10-19. A photocurable system comprising vinyl ether or (meth)acrylate monomers and cycloaliphatic epoxy is also taught.

It would have been obvious to one skilled in the art at the time of the invention to employ the wax-coated silica flatting agent taught by WO '030 as the flatting agent in the radiation curable compositions taught by WO '240. WO '240 teaches that flatting agents may be added. WO '030 teaches that the disclosed matting paste can be used in cationic or cationic/free radical cure systems without detriment of other desired film properties.

Art Unit: 1711

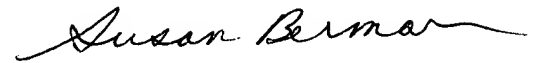
*Conclusion*

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Susan Berman whose telephone number is (703) 308-0040.

The fax number for this group is (703) 872-9310 or, for submissions after Final Rejection, (703) 872-9311.

Any inquiry of a general nature or relating to the status of this application should be directed to the Customer Service telephone number (703) 306-5665.

S B  
6/16/01



Susan Berman  
Primary Examiner  
Art Unit 1711